

### **IN THE CLAIMS**

Please amend the claims as follows.

1. (Previously Presented) An on-board base station, comprising:
  - an interface device on board an aircraft that interfaces with a separate wireless phone of a user inside the aircraft and with a wireless bearer system;
  - an RF detector that detects RF emissions of the separate wireless phone;
  - a controller coupled to the RF detector, that controls RF emissions of the separate wireless phone, as a function of detected RF emissions, to maintain the RF emissions below a predetermined level.
2. (Previously Presented) An on-board base station according to Claim 8, wherein the wireless bearer system is a SATCOM system,
  - wherein said interface device receives signals from and transmits signals to the separate wireless phone and receives signals from and transmits signals to the SATCOM system, and
  - wherein said controller controls said interface device to maintain the RF emissions of the separate wireless phone below a predetermined level.
3. (Previously Presented) An on-board base station according to Claim 2, wherein said interface device also interfaces through the SATCOM system to a cellular network and then with a public switched telephone network to register the separate wireless phone as a roaming subscriber on the contacted cellular network.
4. (Previously Presented) An on-board base station according to Claim 8, wherein the predetermined level is a level above which RF emissions will interfere with aircraft systems.
5. (Previously Presented) An on-board base station according to Claim 2, further comprising:

a SATCOM gateway on board the aircraft that converts signals received from the wireless phone to protocols of the SATCOM system and that converts signals received from the SATCOM system to protocols of the separate wireless phone.

6. (Previously Presented) An on-board base station according to Claim 8, further comprising:

an antenna in a cabin of the aircraft that receives output signals from the separate wireless phone and conveys the output signals to said interface device.

7. (Previously Presented) An on-board base station according to Claim 6, further comprising:

a media converter that conveys the signals between said antenna and said interface device.

8. (Previously Presented) A telecommunication system comprising:

an interface device on board an aircraft that interfaces with a wireless phone of a user inside the aircraft and with a wireless bearer system;

a controller that controls RF emissions of the wireless phone to maintain the RF emissions below a predetermined level;

an RF detector that detects unwanted RF emissions above the predetermined level and unsupported cellphone types,

wherein said controller alerts crew members of the aircraft to the unwanted RF emissions and unsupported cellphone types detected by said RF detector.

9. (Previously Presented) An on-board base station according to Claim 8, further comprising:

an external antenna that respectively transmits and receives direct cellular signals to and from the separate wireless phone when the aircraft is on the ground.

10. (Previously Presented) An on-board base station according to Claim 8, wherein said interface device is a microcell.

11. (Previously Presented) An on-board base station according to Claim 8, wherein said interface device is a picocell.

12. (Original) A telecommunication system, comprising:

an interface device on board an aircraft that interfaces with a wireless phone of a user inside the aircraft and with a SATCOM system, said interface device receiving signals from and transmitting signals to the wireless phone, receiving signals from and transmitting signals to the SATCOM system, and interfacing through the SATCOM system to a cellular network and then with a public switched telephone network to register the wireless phone as a roaming subscriber on the contacted cellular network;

a controller that controls said interface device to maintain RF emissions of the wireless phone below a predetermined level, the predetermined level being a level above which RF emissions will interfere with aircraft systems;

a SATCOM gateway on board the aircraft that converts signals received from the wireless phone to protocols of the SATCOM system and that converts signals received from the SATCOM system to protocols of the wireless phone;

an antenna in a cabin of the aircraft that receives output signals from the wireless phone and conveys the output signals to said interface device;

a media converter that conveys the signals between said antenna and said interface device;

an RF detector that detects unwanted RF emissions above the predetermined level and unsupported cellphone types, wherein said controller alerts crew members of the aircraft to the unwanted RF emissions and unsupported cellphone types detected by said RF detector; and

an external antenna that respectively transmits and receives direct cellular signals to and from the wireless phone when the aircraft is on the ground.

13. (Previously Presented) An on-board base station, comprising;

means on board an aircraft for interfacing with a separate wireless phone of a user inside the aircraft and with a wireless bearer system;

means for controlling RF emissions of the separate wireless phone to maintain the RF emissions below a predetermined level, the predetermined level being a level above which RF emissions will interfere with aircraft systems,

wherein said means for interfacing receives signals from and transmits signals to the separate wireless phone and receives signals from and transmits signals to the wireless bearer system;

means for detecting unwanted RF emissions above the predetermined level and unsupported cellphone types; and

wherein said means for controlling alerts crew members of the aircraft to the unwanted RF emissions and unsupported cellphone types detected by said means for detecting.

14. (Previously Presented) An on-board base station according to Claim 13, wherein the wireless bearer system is a SATCOM system, and

wherein said means for interfacing also interfaces through the SATCOM system to a cellular network and then with a public switched telephone network to register the wireless phone as a roaming subscriber on the contacted cellular network

15. (Previously Presented) An on-board base station according to Claim 14, further comprising:

means on board the aircraft for converting signals received from the wireless phone to protocols of the SATCOM system and for converting signals received from the SATCOM system to protocols of the separate wireless phone.

16. (Cancelled)

17. (Previously Presented) An on-board base station according to Claim 13, further comprising:

means for respectively transmitting and receiving direct cellular signals to and from the wireless phone when the aircraft is on the ground.

18. (Original) A telecommunication system, comprising;

means on board an aircraft for interfacing with a wireless phone of a user inside the aircraft and with a wireless bearer system, said means for interfacing for receiving signals from and transmitting signals to the wireless phone, for receiving signals from and transmitting signals to the wireless bearer system, and for interfacing through the wireless bearer system to a cellular network and then with a public switched telephone network to register the wireless phone as a roaming subscriber on the contacted cellular network;

means for controlling RF emissions of the wireless phone to maintain the RF emissions below a predetermined level, the predetermined level being a level above which RF emissions will interfere with aircraft systems;

means on board the aircraft for converting signals received from the wireless phone to protocols of the wireless bearer system and for converting signals received from the wireless bearer system to protocols of the wireless phone;

means for detecting unwanted RF emissions above the predetermined level and unsupported cellphone types, wherein said means for controlling alerts crew members of the aircraft to the unwanted RF emissions and unsupported cellphone types detected by said means for detecting; and

means for respectively transmitting and receiving direct cellular signals to and from the wireless phone when the aircraft is on the ground.

19. (Previously Presented) An on-board base station implemented method of two-way communications using a separate wireless phone on board an aircraft, said method comprising the steps of:

interfacing on board the aircraft with the separate wireless phone of a user inside the aircraft and with a wireless bearer system;

controlling RF emissions of the separate wireless phone to maintain the RF emissions below a predetermined level;

detecting unwanted RF emissions above the predetermined level and unsupported cellphone types,

wherein said controlling step comprises alerting crew members of the aircraft to the unwanted RF emissions and unsupported cellphone types detected in said detecting step.

20. (Previously Presented) A method according to Claim 19, wherein the wireless bearer system is a SATCOM system, and

wherein said interfacing step comprises receiving signals from and transmitting signals to the separate wireless phone and receiving signals from and transmitting signals to the SATCOM system.

21. (Previously Presented) A method according to Claim 19, wherein said interfacing step further comprises interfacing through the wireless bearer system to a cellular network and then with a public switched telephone network to register the separate wireless phone as a roaming subscriber on the contacted cellular network.

22. (Original) A method according to Claim 19, wherein the predetermined level is a level above which RF emissions will interfere with aircraft systems.

23. (Previously Presented) A method according to Claim 20, further comprising the step of: converting signals received from the wireless phone to protocols of the SATCOM system and converting signals received from the SATCOM system to protocols of the separate wireless phone.

24. (Cancelled)

25. (Previously Presented) A method according to Claim 19, further comprising the step of: transmitting and receiving direct cellular signals to and from the separate wireless phone when the aircraft is on the ground.

26. (Original) A method of two-way communications using a wireless phone on board an aircraft, said method comprising the steps of:

interfacing on board the aircraft with the wireless phone of a user inside the aircraft and with a wireless bearer system, said interfacing step comprising receiving signals from and transmitting signals to the wireless phone, receiving signals from and transmitting signals to the wireless bearer system, and interfacing through the wireless bearer system to a cellular network and then with a public switched telephone network to register the wireless phone as a roaming subscriber on the contacted cellular network;

controlling RF emissions of the wireless phone to maintain the RF emissions below a predetermined level, the predetermined level being a level above which RF emissions will interfere with aircraft systems;

converting signals received from the wireless phone to protocols of the wireless bearer system and converting signals received from the wireless bearer system to protocols of the wireless phone;

detecting unwanted RF emissions above the predetermined level and unsupported cellphone types, wherein said controlling step comprises alerting crew members of the aircraft to the unwanted RF emissions and unsupported cellphone types detected in said detecting step; and

transmitting and receiving direct cellular signals to and from the wireless phone when the aircraft is on the ground.

27. (Previously Presented) Computer executable code for implementing a method in an on-board base station of two-way communications using a separate wireless phone on board an aircraft, said code for executing the steps comprising:

interfacing on board the aircraft with a separate wireless phone of a user inside the aircraft and with a wireless bearer system;

controlling RF emissions of the separate wireless phone to maintain the RF emissions below a predetermined level;

detecting unwanted RF emissions above the predetermined level and unsupported cellphone types,

wherein said controlling step comprises alerting crew members of the aircraft to the unwanted RF emissions and unsupported cellphone types detected in said detecting step.

28. (Previously Presented) Computer executable code according to Claim 27, wherein said interfacing step comprises receiving signals from and transmitting signals to the separate wireless phone and receiving signals from and transmitting signals to the wireless bearer system.

29. (Previously Presented) Computer executable code according to Claim 28, wherein said interfacing step further comprises interfacing through the wireless bearer system with a cellular network and then with a public switched telephone network to register the separate wireless phone as a roaming subscriber on the contacted cellular network.

30. (Original) Computer executable code according to Claim 27, wherein the predetermined level is a level above which RF emissions will interfere with aircraft systems.

31. (Previously Presented) Computer executable code according to Claim 27, wherein the wireless bearer system is a SATCOM system, and

said code for further executing the step of converting signals received from the separate wireless phone to protocols of the SATCOM system and converting signals received from the SATCOM system to protocols of the wireless phone.

32. (Cancelled)

33. (Previously Presented) Computer executable code according to Claim 27, said code for further executing the step of:

transmitting and receiving direct cellular signals to and from the separate wireless phone when the aircraft is on the ground.



34. (Original) Computer executable code for implementing a method of two-way communications using a wireless phone on board an aircraft, said code for executing the steps comprising:

interfacing on board the aircraft with a wireless phone of a user inside the aircraft and with a wireless bearer system, said interfacing step comprising receiving signals from and transmitting signals to the wireless phone, receiving signals from and transmitting signals to the wireless bearer system, and interfacing through the wireless bearer system with a cellular network and then with a public switched telephone network to register the wireless phone as a roaming subscriber on the contacted cellular network;

controlling RF emissions of the wireless phone to maintain the RF emissions below a predetermined level, the predetermined level being a level above which RF emissions will interfere with aircraft systems;

converting signals received from the wireless phone to protocols of the wireless bearer system and converting signals received from the wireless bearer system to protocols of the wireless phone;

detecting unwanted RF emissions above the predetermined level and unsupported cellphone types, wherein said controlling step comprises alerting crew members of the aircraft to the unwanted RF emissions and unsupported cellphone types detected in said detecting step; and

transmitting and receiving direct cellular signals to and from the wireless phone when the aircraft is on the ground.

35-36. (Canceled)

37. (Previously Presented) A method of two-way communications using a separate wireless phone on board an aircraft, said method comprising the steps of:

providing a base station on the aircraft to receive outbound signals from the wireless phone;

transmitting the outbound signals from the aircraft to a wireless bearer system for communication to a ground earth station;

receiving, by the base station, inbound signals from the wireless bearer system;

transmitting the inbound signals from the base station to the separate wireless phone; ~~and~~  
interfacing, through the wireless bearer system, the base station with a cellular network  
and then with a public switched telephone network to register the separate wireless phone as a  
roaming subscriber on the contacted cellular network,

wherein the base station controls RF emissions of the separate wireless phone to maintain  
the RF emissions below a predetermined level, the predetermined level being a level above  
which RF emissions will interfere with aircraft systems;

detecting unwanted RF emissions above the predetermined level and unsupported  
cellphone types,

wherein the base station alerts crew members of the aircraft to the unwanted RF  
emissions and unsupported cellphone types detected in said detecting step.

38. (Previously Presented) A method according to Claim 37, further comprising the step of:  
converting signals received from the separate wireless phone to protocols of the wireless  
bearer system and converting signals received from the wireless bearer system to protocols of the  
separate wireless phone.

39. (Cancelled)

40. (Previously Presented) A method according to Claim 37, further comprising the step of:  
transmitting and receiving direct cellular signals to and from the separate wireless phone  
when the aircraft is on the ground.

41. (Original) A method of two-way communications using a wireless phone on board an  
aircraft, said method comprising the steps of:

providing a base station on the aircraft to receive outbound signals from the wireless  
phone;

transmitting the outbound signals from the aircraft to a wireless bearer system for  
communication to a ground earth station;

receiving, by the base station, inbound signals from the wireless bearer system;

transmitting the inbound signals from the base station to the wireless phone;

interfacing, through the wireless bearer system, the base station with a cellular network and then with a public switched telephone network to register the wireless phone as a roaming subscriber on the contacted cellular network;

controlling RF emissions of the wireless phone to maintain the RF emissions below a predetermined level, the predetermined level being a level above which RF emissions will interfere with aircraft systems;

converting signals received from the wireless phone to protocols of the wireless bearer system and converting signals received from the wireless bearer system to protocols of the wireless phone;

detecting unwanted RF emissions above the predetermined level and unsupported cellphone types, wherein said controlling step comprises alerting crew members of the aircraft to the unwanted RF emissions and unsupported cellphone types detected in said detecting step; and

transmitting and receiving direct cellular signals to and from the wireless phone when the aircraft is on the ground.